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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/656,440	09/06/2000	Katsuaki Tajima	48864-030	9740

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Washington, DC 20005-3096

EXAMINER

PHAM, THIERRY L

ART UNIT	PAPER NUMBER
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2624

DATE MAILED: 03/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/656,440	Applicant(s) TAJIMA ET AL.	
	Examiner Thierry L. Pham	Art Unit 2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 January 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 5-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 5-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

- This action is responsive to the following communication: an Amendment filed on 1/12/06.
- Claims 1, 5-7 are pending in application.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki et al (U.S. 5828780), and in view of Ito et al (U.S. 5884120).

Regarding claim 1, Suzuki discloses an image processing apparatus (image processing device 107, fig. 1) for processing a job to be given to an output device (output device 102, fig. 1), each page having a predetermined number of sections of standard color space (image data is divided into plurality of regions in a CIELAB standard color space, S807, fig. 8, col. 3, lines 8-10, col. 8, lines 48-62), the image processing apparatus comprising:

- a decision controller (image processing apparatus includes virtual device "VD" within an image processing device, figs. 5-7, col. 7, lines 3-8) for deciding for each page whether image data included in each section of standard color space are data within a color reproduction range of the output device or not (determining whether or not the image data of each region is within the color reproduction range of output device 102, S808, fig. 8, col. 3, lines 13-16, col. 8, lines 52-62, col. 9, lines 33-37); and
- a color compression controller (image processing apparatus includes compression controller, col. 16, lines 3-7), for performing a color compression process (linear color compression for compressing image data that is not within the color reproduction range to an allowable value (range) of an output device 102, S812, fig. 8, figs. 13 and 21, col. 3, lines 20-37 and col. 6, lines 60-67) uniformly to said each page of the image data in accordance with the decision of the

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decision controller so as to supply the processed data to the output device (col. 8, lines 39-61 and col. 13, lines 15-27), wherein

- performing the color compression (performing color compression for image data that are not within a reproduction range of output device 102, S812, fig. 8, figs. 13 and 21, col. 3, lines 20-37 and col. 6, lines 60-67) uniformly to said each page of the job includes determining the sections of standard color space that require the color compression process in the image data of the job (also determining whether each region of divided spaces is within a reproduction range of output device 102, S808, fig. 8, col. 8, lines 39-61 and col. 13, lines 15-27) and performing the color compression process (and to perform color compression on divided regions that are not within color production range of output device 102, S809, fig. 8 and fig. 12, col. 8, lines 50-62) on the sections of standard color space of said each page that are determined to be required in image data.

However, Suzuki fails to teach an image processing apparatus having a memory for memorizing all of the plural pages of the job and wherein image data as taught by Suzuki comprising plurality of pages.

Ito, in the same field of endeavor for image processing, teaches an image processing apparatus (image data processing/controller, fig. 3a & 3b) having a memory (image memory 17, fig. 4, col. 4, lines 35-52) for memorizing all of the plural pages (image memory 17 for storing image data of documents, wherein each document comprising plural of pages, col. 4, lines 63-67 and col. 6, lines 35-40) of the job and that it is well known in the art that an image data comprising plurality of pages (an image data comprising plurality of pages, col. 7, lines 30-35). In other words, Suzuki explicitly teaches an apparatus and method for processing image data (i.e. document as shown in fig. 10) *in general*, but fails to explicitly state that image data (i.e. document) comprising plurality of pages. It is well known in the art that image data (i.e. also refers to as document) contains plurality of 1-N pages (e.g. document of four pages, ten pages, and etc) as taught by Ito (col. 6, lines 35-40). Image memory 17 as taught by Ito also stores plurality of documents, wherein each document comprising plurality of pages. Number of pages and/or documents can be stored in image memory 17 depends on its storage capacity (e.g. 100MB and etc.).

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It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify image processing apparatus of Suzuki to process image data with plurality of pages as per teachings of Ito because of the following reason: (●) to prevent the entire color image from losing the color attractiveness due to effect by data of a few pixel data outside the color reproduction range (Suzuki, col. 2, lines 44-52); (●) to allow an image processing device of Suzuki to process print job with multiple pages. In addition, it would have been obvious to determine whether all pages of an image data (e.g. print job) is within a reproduction range or not, and to perform color compression accordingly to all pages of image data (e.g. print job) to ensure all print data are outputted within a color reproduction range of an output device.

Therefore, it would have been obvious to combine Suzuki with Ito to obtain the invention as specified in claim 1.

Regarding claim 5, Ito further teaches the image processing device apparatus according to claim 1, wherein the output device is a printer for printing an image in accordance with the image data (copy machine as shown in fig. 1 includes a print engine for output image data onto a recording medium) and wherein the image processing apparatus is built in the printer (image data processing unit is incorporated within a copy machine as shown in fig. 3, col. 1, lines 38-58).

Regarding claim 6, Ito further teaches the image processing apparatus according to claim 1, wherein the image data are generated by an image reader (copy machine as shown in fig. 1 includes a reader for reading original images to be copied), and the image processing apparatus is built in the image reader (CPU 102 is incorporated within an copy machine, fig. 3a).

Regarding claim 7: Claim 7 is a method corresponding to the apparatus and it recites limitations that are similar and in the same scope of invention as to claim 1; therefore, claim 7 is rejected for the same rejection rationale/basis as described in claim 1 above.

Response to Arguments

Applicant's arguments filed 1/12/06 have been fully considered but they are not persuasive.

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- Regarding claims 1 & 7, the applicants argued the cited prior arts of record (US 5884120 and US 5828780) fail to teach and/or suggest a memory for memorizing all of the plural pages of the job.

In response, the examiner notes that the applicants argued subject matters that were not previous cited in claims 1 & 7. However, Ito explicitly teaches an image processing apparatus (image data processing/controller, fig. 3a & 3b) having a memory (image memory 17, fig. 4, col. 4, lines 35-52) for memorizing all of the plural pages (image memory 17 for storing image data of documents, wherein each document comprising plural of pages, col. 4, lines 63-67 and col. 6, lines 35-40) of the job and that it is well known in the art that an image data comprising plurality of pages (an image data comprising plurality of pages, col. 7, lines 30-35). Please see rejection to claim 1 above for more details.

- Regarding claims 1 & 7, the applicants argued the cited prior arts of record (US 5884120 and US 5828780) fail to teach and/or suggest a color compressing controller for performing a color compression process uniformly to each of the plural pages of image data.

In response, the examiner fully disagrees with the applicants' arguments. Suzuki explicitly teaches a color compression controller (image processing apparatus includes compression controller, col. 16, lines 3-7), for performing a color compression process (linear color compression for compressing image data that is not within the color reproduction range to an allowable value (range) of an output device 102, S812, fig. 8, figs. 13 and 21, col. 3, lines 20-37 and col. 6, lines 60-67) uniformly to said each page of the image data in accordance with the decision of the decision controller so as to supply the processed data to the output device (col. 8, lines 39-61 and col. 13, lines 15-27). And since Suzuki's image processing apparatus is to process an entire document or image data and since it is well known in the art that document or image data can ranged from 1-N pages (see Ito for details), therefore, image processing apparatus as taught by Suzuki involves processing entire document that can ranged from a single page or plural of pages. Please also see rejection rationale/basis to claim 1 above for more details.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

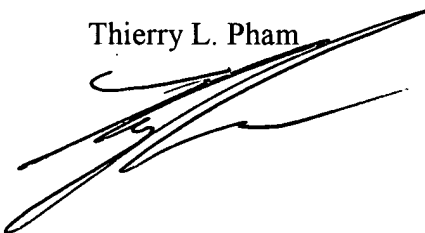
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thierry L. Pham whose telephone number is (571) 272-7439. The examiner can normally be reached on M-F (9:30 AM - 6:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David K. Moore can be reached on (571)272-7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Thierry L. Pham



GABRIEL GARCIA
PRIMARY EXAMINER